

## **REMARKS**

### **Status**

This Amendment is responsive to the Office Action dated October 14, 2005, in which Claims 1-15 were rejected. Claims 1, 5, 6, and 9-11 are amended, and Claims 16-18 are withdrawn. Accordingly, Claims 1-15 are pending in the application, and are presented for reconsideration and allowance.

### **Claim Rejection - 35 USC 112**

Claims 1 – 15 stand rejected under 35 USC 112, first paragraph, as failing to comply with the written description requirement. The rejection asserts that “[t]he specification disclosure fails to provide an adequate written description as how to produce a photothermographic material when thermally produced provide an area disposed along a length of at least one edge of the photothermographic material, the area having an optical density less than the  $D_{max}$  and greater than the  $D_{min}$  of the photothermographic material.” This rejection is respectfully traversed.

Claim 1 has been amended to more clearly define the present invention by defining  $D_{min}$  and  $D_{max}$  and by clarifying that the optical density of the photothermographic material is determined after exposure and thermal processing thereof. The specification provides copious written description of how to produce the claimed invention. Thus, at page 3, lines 8 – 10, it is stated “Another object of the present invention is to provide such a material (i. e., photothermographic) that, when thermally processed, comprises an area of mid-range density along one edge of the material.” At pages 5 and 6, definitions are given for “photothermographic material”, “ $D_{min}$ ” and “ $D_{max}$ ”. At page 6, lines 10 – 19, a description is given how to thermally process the photothermographic material. Figure 1 and the specification at pages 6 and 7 describe an imaging apparatus for exposing and developing photothermographic material. Figures 3 – 5 and specification pages 8 – 11 present detailed descriptions of the problems solved by the present invention, how the invention is produced, and several embodiments of the invention. The claims are clearly supported in the specification as filed. It is therefore requested that this rejection be reconsidered and withdrawn.

Claims 1 – 15 stand rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection is respectfully traversed.

The claims have been amended by giving antecedent basis for Dmin and Dmax and by defining these terms. The support for the elements of claim 1 and the other claims is presented above and is equally applicable here. As pointed out the metes and bounds of Dmin and Dmax are disclosed in the specification at pages 5 and 6 and in Figs. 3 – 5 and pages 8 – 11. The claims clearly meet the requirements of 35 USC 112. It is requested that this rejection be reconsidered and withdrawn.

#### **Claim Rejection - 35 USC 102 and 103**

Claims 1 - 15, stand rejected under 35 USC 102 (e) as being anticipated by, or in the alternative, under 35 USC 103 (a) as obvious over US Patent No. 6,569,614 (*Shoji*). This rejection is respectfully traversed.

According to the present invention, there is provided a photothermographic material including a support having hereon one or more thermally-developable imaging layers which are developable to produce an image when the photothermographic material is thermally processed. the photothermographic material has an inherent Dmin and Dmax optical density after thermal processing. Dmin is defined as image density achieved when the photothermographic material is thermally developed without prior exposure to radiation and Dmax is defined as a maximum image density achieved when the photothermographic material is exposed to a particular radiation source and then thermally developed. The photothermographic material has an area which is disposed along a length of at least one edge of the material and, which, when exposed and thermally processed by a thermal processor, has an optical density less than the Dmax and greater than the Dmin of the photothermographic material.

The present invention solves two problems in the prior art. The first problem involves the potential for the emulsion of the photothermographic material being marred or peeled away from the support if the thermally processed

film is not sufficiently cooled prior to coming into contact with a guide or blade. To reduce/eliminate such an occurrence, existing films include a leading edge having an area having a clear/transparent  $D_{min}$ . This is shown in Figure 2 and described in the Specification at page 8, lines 1 – 11. This solution presents a second problem because the clear/transparent strip/edge of will allow light to pass through when placed on a light box. Such an emission of light can be an annoyance/distraction to a radiologist as they read the printed image. This can be particularly distracting if one or more other edges or borders of the film have a value of  $D_{max}$ . The present invention (as shown, e. g., in Figures 3 – 5) solves both problems by providing a photothermographic material with a non- $D_{min}$  area disposed at an edge, preferably the leading edge, of the material. The area has an optical density between the  $D_{min}$  and  $D_{max}$  of the material. Applicants have recognized that providing such a non- $D_{min}$  area adjacent the leading edge of the material improves the “readability” and aesthetic qualities of the material. More particularly, Applicants have noticed that imaging the leading edge to a mid-density (claims 5 and 6), reduces/minimizes the annoyance/distraction effects which occur with the clear/transparent edge. Applicants have also determined that the adhesion characteristics of the processed emulsion according to the invention are sufficient to minimize peel back so as to provide an acceptable/suitable processed image.

Clearly, *Shoji* does not anticipate or render obvious the claimed invention. The problem to be solved “is to provide a photosensitive material and a recording method is free from bleeding in a boundary when a void image is formed in a black ground or when a black ground is recorded in a half tone portion.” (Col. 5, lines 49 – 52). The disclosed solution is to control the absorbance and range of exposure of a heat-development photosensitive material. (See Col. 5, line 55 – Col. 6, line 8.) Although densities are disclosed in *Shoji*, there is no disclosure of the problems solved or the solution provided by the present invention. The Examiner admits as much by the statement “*Shoji et al* may not disclose whether an area disposed along a length of at least one edge of the photothermographic material, the area having an optical density less than the  $D_{max}$  and greater than the  $D_{min}$ .” Absent a teaching the Examiner falls back on inherency to reject the claims. The solution to the problems solved by the

claimed invention are not solved by a random, unplanned region of a thermally processed photothermographic material which may, but does not have to have, an area along an edge of the material as defined in the claims. The present invention solves the peeling and annoying light problem of the prior art. Random densities do not solve these problems. It is submitted that claims 1 – 15 are novel and nonobvious over *Shoji* and should be allowed.

Claims 1 – 15 stand rejected under 35 USC 102 (e) as being anticipated by, or in the alternative, under 35 USC 103 (a) as obvious over EP 0600586B1 (EP '586). This rejection is respectfully traversed.

The discussion above relating to the claimed invention is equally applicable here and will not be repeated. The rejection on EP '586 is similar to the rejection on *Shoji* and relies, not on a specific disclosure in EP '586 which anticipates or renders obvious the claimed invention, but rather relies on the spurious argument of inherency. This argument is challenged. As with *Shoji*, the problem to be solved and the solution disclosed is completely inapposite to the present invention. The problem to be solved is fog stability on shelf aging of a photothermographic silver halide material. The solution is a combination of an isocyanide and a halogenated compound. There is no disclosure in EP '586 of the problems solved and the solution presented by the claimed invention. Again, arguing inherency cannot cure the deficiencies in the disclosure of EP '586. It is submitted that claims 1 – 15 are novel and nonobvious over EP '586 and should be allowed.

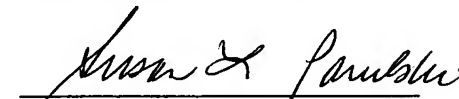
### **Summary**

Should the Examiner consider that additional amendments are necessary to place the application in condition for allowance, the favor is requested of a telephone call to the undersigned counsel for the purpose of discussing such amendments.

For the reasons set forth above, it is believed that the application is in condition for allowance. Accordingly, reconsideration and favorable action are respectfully solicited.

The Commissioner is hereby authorized to charge any fees in connection with this communication to Eastman Kodak Company Deposit Account No. 05-0225.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Susan L. Parulski", is written over a horizontal line.

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